IN THE CLAIMS:

1. (currently amended) A control system for a vehicle comprising:

a GPS system generating a vehicle position signal for a vehicle relative to a surface;

a plurality of driver inputs;

a plurality of vehicle ~~inputs~~ sensors each providing a vehicle input; and

a controller coupled to the GPS system, the plurality of driver inputs and the plurality of vehicle inputs, said controller determining a predicted path in response to the plurality of driver inputs and the vehicle inputs, and determining a desired path in response to the GPS system, said controller performing a comparison of the predicted path and the desired path, said controller generating a control signal in response to the comparison.

2. (original) A control system as recited in claim 1 wherein said controller performs the comparison using colinearity of a confidence level.

3. (original) A control system as recited in claim 1 wherein said controller performs the comparison using a linear regression model, said threshold corresponding to an estimated error.

4. (original) A control system as recited in claim 1 wherein the linear regression model is a function of pitch angle, yaw angle and vehicle speed.

5. (currently amended) A control system as recited in claim 1 wherein the plurality of vehicle inputs includes a vehicle speed.

6. (original) A control system as recited in claim 1 wherein the pitch angle and yaw angle are determined in the GPS receiver.

7. (original) A control system as recited in claim 1 further comprising an audible indicator, said audible indicator operating in response to the control signal.

8. (original) A control system as recited in claim 1 further comprising a visual indicator, said visual indicator operating in response to the control signal.

9. (original) A control system as recited in claim 1 further comprising an intervention module, said intervention module operating in response to the control signal.

10. (original) A control system as recited in claim 1 wherein the intervention module generates a vehicle speed restriction.

11. (original) A control system as recited in claim 1 wherein the intervention module generated a change in a center of gravity by controlling a suspension component.

12. (original) A control system as recited in claim 1 wherein the intervention module generated a change in a center of gravity by controlling a shock absorber.

13. (original) A control system as recited in claim 1 wherein the intervention module generates a steering angle change.

14. (original) A control system as recited in claim 1 wherein the intervention module generates a gas tank load shift.

15. (original) A control system as recited in claim 1 further comprising a road condition input, said controller generating the predicted path in response to the road condition input.

16. (currently amended) A control system for a vehicle comprising:

a driving condition database having driving conditions therein;

a GPS system generating a vehicle position signal for a vehicle relative to a surface;

a plurality of driver inputs;

a plurality of vehicle ~~inputs~~ sensors each providing a vehicle input; and

a controller coupled to the GPS system, the plurality of driver inputs and the plurality of vehicle inputs, said controller determining a predicted condition in response to the plurality of driver inputs, the vehicle inputs and the driving conditions, and determining a desired condition in response to the GPS system and the driving conditions, said controller performing a chaos-theory based comparison of the predicted path and the desired path, said controller generating controlling an intervention module or an indicator in response to the comparison.

17. (original) A control system as recited in claim 16 wherein the predicted condition comprises a predicted path and the desired condition comprise a desired path.

18. (original) A control system as recited in claim 16 wherein said controller performs the chaos theory based comparison using colinearity of a confidence level.

19. (original) A control system as recited in claim 16 wherein said controller performs the comparison using a linear regression model, said threshold corresponding to an estimated error.

20. (original) A control system as recited in claim 19 wherein the linear regression model is a function of pitch angle, yaw angle and vehicle speed.

21. (currently amended) A method of controlling an automotive vehicle comprising:

generating a vehicle position signal for a vehicle relative to a surface;

generating a plurality of driver inputs;

generating a plurality of vehicle inputs;

determining a predicted path in response to the plurality of driver inputs, and determining the vehicle inputs and a desired path in response to the vehicle position;

performing a comparison of the predicted path and the desired path; and

generating a control signal in response to the comparison.